



Statement
of the
National Association of Mutual Insurance Companies
to the
United States
House of Representatives Committee on Energy and Commerce
Subcommittee on
Digital Commerce and Consumer Protection
Hearing on
Self-Driving Vehicle Legislation
Tuesday, June 27, 2017 - 10:00am
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Self-Driving Vehicle Legislation

June 27, 2017

The National Association of Mutual Insurance Companies (NAMIC) is pleased to provide comments to the House Energy and Commerce Subcommittee on Digital Commerce and Consumer Protection in its consideration of the hurdles for testing and successful deployment of automated driving systems (ADS). Both state and federal roles are vital to ensure safety while promoting innovation and American competitiveness. We appreciate the committee's focus on an important matter that has the potential to greatly impact the domestic U.S. property/casualty insurance industry.

NAMIC is the largest property/casualty insurance trade association in the country, with more than 1,400 member companies representing 39 percent of the total market. NAMIC supports regional and local mutual insurance companies on main streets across America and many of the country's largest national insurers. NAMIC member companies serve more than 170 million policyholders and write more than \$230 billion in annual premiums. Our members account for 54 percent of homeowners, 43 percent of automobile, and 32 percent of the business insurance markets.

NAMIC fully supports ADS innovation and competitive development that enhances safety. In this context, ADS innovation will be the deliberate application of information, imagination, and initiative by which new ideas are generated and converted into greater driving safety. It is important to note, however, that while technology is a key part of ADS innovation, it is not the only part. Integrating innovative practices, operations, rules, and regulations will be just as necessary to ADS innovation as technology.

With respect to Automated Driving Systems (ADS), NAMIC has participated in National Highway Transportation Safety Administration (NHTSA) panels relating to state authority and pre-market approval, serves on the Board Member of Advocates for Highway Safety and Auto Safety, and is working with the Insurance Institute for Highway Safety supporting the Virginia Tech Transportation Institute as part of the National Cooperative Highway Research Program.

Automated Vehicle Technology

Enthusiastic advocates of ADS contend that NHTSA blames 94 percent of all car crashes on human error, and infer or directly state that ADS will eliminate that human error, and thus the overwhelming majority of car crashes. That oft-cited 94 percent comes from NHTSA's Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey, which reported on The National Motor Vehicle Crash Causation Survey conducted from 2005 to 2007. The critical reason, which is the last event in the crash causal chain, was assigned to the driver in 94 percent (± 2.2 percent) of the crashes in that survey, but the NHTSA defined the 'critical reason' as only the immediate reason for the critical pre-crash event, and simply the last failure in the causal chain of events leading up to the crash.

Critical reasons were broadly classified into recognition errors, decision errors, performance errors, and non-performance errors:

Self-Driving Vehicle Legislation

June 27, 2017

- Recognition error, which includes driver's inattention, internal and external distractions, and inadequate surveillance, was the most (41 percent \pm 2.2 percent) frequently assigned critical reason.
- Decision error, such as driving too fast for conditions, too fast for a curve, false assumption of others' actions, illegal maneuver and misjudgment of gap or others' speed accounted for about 33 percent (\pm 3.7 percent) of the crashes.
- In about 11 percent (\pm 2.7 percent) of the crashes, the critical reason was performance error such as overcompensation, poor directional control, etc.
- Sleep was the most common critical reason among non-performance errors that accounted for 7 percent (\pm 1.0 percent) of the crashes.
- Other driver errors were recorded as critical reasons for about 8 percent (\pm 1.9 percent) of the drivers.

These specific definitions are relevant to the proposed application of ADS as a remedy to these specific errors. The central premise behind the development and broad application of ADS technology is that ADS will have fewer of these specific recognition errors, decision errors, performance errors and other errors than human drivers represented by the survey. ADS that result in a significant reduction in these specific errors should have a corresponding reduction in crashes and result in greater vehicle and personal safety.

The Hurdles for Testing and Successful ADS Deployment

ADS may have the potential to be much safer than human drivers, and could result in a dramatic decrease in crashes and highway deaths. But ADS are also experimental, complex, and include numerous known and unknown hazards as well as unintended consequences. There are literally millions of related technological and policy questions also related to liability, cyber security, vehicle connectivity, and infrastructure.

An even more challenging area is how ADS technology will deal with the transitional period, while non-ADS drivers share the road and continue to make the same and new recognition errors, decision errors, performance errors and other errors. As policies and regulations are made toward this ambitious ADS safety goal, communicating relevant data and analysis is critical to verify the safest transition from user-controlled to automated driving.

The technical challenges to ADS testing and successful development are vast and complex — too vast and complex to even begin to enumerate here. But even if these thousands of technical challenges can be successfully addressed, ADS will not be adopted unless consumers can be convinced that ADS use will be safe and desirable. Recent surveys by both the Massachusetts Institute of Technology and J.D. Power have indicated that consumer comfort or trust in full automation appears to actually be declining. A shift away from trust in automation was observed across all age groups,

Self-Driving Vehicle Legislation

June 27, 2017

and most notably in younger age ranges which had previously been most open to ADS. Roughly half of those surveyed stated that they would never purchase an ADS vehicle.

As consumers learn more about ADS, they appear to have more questions rather than fewer. A critical hurdle for ADS deployment is that consumers lack relevant information to adequately gauge the performance and potential benefits of ADS. Consumers will require objective assessment and evaluation of just how ADS are safer than human drivers, and in what conditions. Consumer acceptance will require expert collection and evaluation of data and analysis on the ADS as designed, as well as objective data and analysis from crashes involving ADS.

The history of the auto insurance industry provides ample evidence of that experience and expertise needed to gain consumer acceptance, which will be augmented by the commitment of the insurance industry to enhance driving safety. A critical requirement for the testing and successful development of ADS will be insurers using their decades of expertise to provide objective, data-based safety evaluations. This will require ADS companies to collect uniform ADS design and safety information and make that information available to insurers. In addition, insurers will need access to ADS information and data – including crash accident and incident information – that is timely, complete, and useful.

The Insurance Institute for Highway Safety is the premier organization dedicated to reducing the losses — deaths, injuries, and property damage — from crashes on the nation's roads. The Highway Loss Data Institute provides scientific studies of insurance data representing the human and economic losses resulting from the ownership and operation of different types of vehicles and publishes insurance loss results by vehicle make and model. Advocates for Highway and Auto Safety is an alliance of safety groups and insurance companies working together to make America's roads safer.

State and Federal Roles to Ensure Safety While Promoting Innovation and American Competitiveness

Promoting innovation and competitiveness will require joint development of state and federal rules and regulations. NAMIC advocates that the roles of states and federal authorities would best facilitate ADS safety development as follows:

1. The Federal government – through NHTSA – should have the authority to make determinations of the required performance and safety, as well as data integrity, of ADS.
2. States and localities should have the authority to make the determinations of the registration, licensing, and operation of ADS in that state/locality.
3. States should retain the regulation of ADS insurance for the vehicle or operator.
4. States should define and address ADS personal liability issues in state/tort law and regulation in line with existing liability constructs. States and federal

Self-Driving Vehicle Legislation

June 27, 2017

- authorities should have the authority to define and address ADS liability issues in law and regulation.
5. States and federal authorities working together should make clear and workable data security and privacy requirements for ADS.

NAMIC has provided the Subcommittee staff with numerous and detailed comments on the proposed Self-Driving Vehicle Legislation now being considered by the Subcommittee. While generally supportive of the proposals by the Subcommittee and strongly supportive of the statutory mission of NHTSA to regulate the design and performance of motor vehicles to ensure public safety, the proposals creating exemptions from NHTSA review and pre-market approval are concerning. It is the role of NHTSA to issue comprehensive standards and regulations to govern the ADS Safety, and where NHTSA does not fully do so, the states should have every authority to provide state regulations to ensuring public safety. There is jurisdictional uncertainty as to when, where and how NHTSA voluntary guidelines and exemptions may allow – or even require – states to provide safety related ADS regulations. We suggest that addressing this question is paramount to the development and adoption of safe ADS.

In summary, NAMIC supports ADS development, and insurers are leading advocates toward 100 percent adoption of 100 percent safe ADS. The realistic support of all potential for greater safety requires that insurance companies be encouraged to objectively identify and analyze facts and data on the leading edge of ADS development. The development and adoption of ADS will be benefited by substantial policy and coverage changes (e.g., enhanced personal cyber liability coverage) which will be informed by the same factual analysis and review. As the primary rationale for ADS development is reducing vehicle accidents and deaths, it is important that insurers have an active role in the development of a realistic appraisal of those benefits.

NAMIC greatly appreciates the opportunity to provide this testimony to the Committee and looks forward to working with the Committee in the development of ADS policy and regulation.